Author index

Ahlsén, M. *see* Krämer, D.K.
Ajisaka, R. *see* Otsuki, T.
Arbo, I. *see* Kemi, O.J.
Armentano, R.L. *see* Cabrera Fischer, E.I.

Bäckström, T. *see* Wang, M.-D.
Balogh, Á. *see* Fülöp, L.
Bányász, T. *see* Fülöp, L.
Bhattacharya, J. *see* Lundberg, J.
Bia, D. *see* Cabrera Fischer, E.I.
Bianchi, R. *see* Romagnoli, I.
Bie, P. *see* Gammelgaard, I.
Bíró, T. *see* Fülöp, L.
Boonyarom, O. & Inui, K. Atrophy and hypertrophy of skeletal muscles: structural and functional aspects, 77
Bruce, S.A. *see* Onambele, G.N.L.
Buus, N.H. *see* Mathiassen, O.N.

Cabrera Fischer, E.I., Bia, D., Camus, J.M., Zócalo, Y., de Forteza, E. & Armentano, R.L. Adventitia-dependent mechanical properties of brachiocephalic ovine arteries in *in vivo* and *in vitro* studies, 103
Camus, J.M. *see* Cabrera Fischer, E.I.
Cannon, J., Kay, D., Tarpenning, K.M. & Marino, F.E. Normalized lengthening peak torque is associated with temporal twitch characteristics in elderly women but not young women, 53
Christensen, K.L. *see* Mathiassen, O.N.

Ebert, B. & Koivisto, A.-P. Editors Choice, 151
Edebo, A. *see* Ewert, S.
oude Egbrink, M. *see* Snoeckx, L.H.E.H.
Ellefsen, S. *see* Hafting, T.
Ellingsen, O. *see* Kemi, O.J.
Ewert, S., Spak, E., Olbers, T., Johnsson, E., Edebo, A. & Fändriks, L. Angiotensin II induced contraction of rat and human small intestinal wall musculature *in vitro*, 33

Fändriks, L. *see* Ewert, S.
Ferreira, L.F., Hageman, K.S., Hahn, S.A., Williams, J., Padilla, D.J., Poole, D.C. & Musch, T.I. Muscle microvascular oxygenation in chronic heart failure: role of nitric oxide availability, 3
de Forteza, E. *see* Cabrera Fischer, E.I.

Fukue, M. *see* Naito, T.
Fülöp, L., Bányász, T., Szabó, G., Tóth, I.B., Bíró, T., Lőrincz, I., Balogh, Á., Petõ, K., Mikó, I. & Nánási, P.P. Effects of sex hormones on ECG parameters and expression of cardiac ion channels in dogs, 163

Gammelgaard, I., Wamberg, S. & Bie, P. Systemic effects of angiotensin III in conscious dogs during acute double blockade of the renin–angiotensin–aldosterone-system, 129
Gavin, T.P., Westerkamp, L.M. & Zwetsloot, K.A. Soleus, plantaris and gastrocnemius VEGF mRNA responses to hypoxia and exercise are preserved in aged compared with young female C57BL/6 mice, 113
Gigliotti, F. *see* Romagnoli, I.
Gorini, M. *see* Romagnoli, I.
Grazzini, M. *see* Romagnoli, I.
Gustafsson, T. *see* Krämer, D.K.

Hafting, T., Haug, T.M., Ellefsen, S. & Sand, O. Hypotonic stress activates BK channels in clonal kidney cells via purinergic receptors, presumably of the $P2Y_1$ subtype, 21
Haga, S. *see* Ikeda, S.
Hageman, K.S. *see* Ferreira, L.F.
Hahn, S.A. *see* Ferreira, L.F.
Haug, T.M. *see* Hafting, T.
Hitomi, Y. *see* Ikeda, S.
Hjeltnes, N. *see* Krämer, D.K.
Hogan, M.C. & McGuigan, M. Editor's Choice, 1
Høydal, M.A. *see* Kemi, O.J.

Iemitsu, M. *see* Otsuki, T.
Ikeda, S., Kawamoto, H., Kasaoka, K., Hitomi, Y., Kizaki, T., Sankai, Y., Ohno, H., Haga, S. & Takemasa, T. Muscle type-specific response of PGC-1α and oxidative enzymes during voluntary wheel running in mouse skeletal muscle, 217
Inagaki, M. *see* Naito, T.
Inui, K. *see* Boonyarom, O.
Ishikawa, S. *see* Naito, T.

Jansson, E. *see* Krämer, D.K.
Johnsson, E. *see* Ewert, S.

Kamata, K., Satoh, T., Matsumoto, T., Noguchi, E., Taguchi, K., Kobayashi, T., Tanaka, H. & Shigenobu, K. Enhancement of methoxamine-induced contractile responses of rat ventricular muscle in streptozotocin-induced diabetes is associated with α_{1A} adrenoceptor upregulation, 173
Kasaoka, K. *see* Ikeda, S.
Kawamoto, H. *see* Ikeda, S.
Kay, D. *see* Cannon, J.
Kemi, O.J., Arbo, I., Høydal, M.A., Loennechen, J.P., Wisløff, U., Smith, G.L. & Ellingsen, O. Reduced pH and contractility in failing rat cardiomyocytes, 185
Kizaki, T. *see* Ikeda, S.
Kobayashi, T. *see* Kamata, K.
Koivisto, A.-P. *see* Ebert, B.
Krämer, D.K., Ahlsén, M., Norrbom, J., Jansson, E., Hjeltnes, N., Gustafsson, T. & Krook, A. Human skeletal muscle fibre type variations correlate with PPARα, PPARδ and PGC-1α mRNA, 207
Krook, A. *see* Krämer, D.K.

Lanini, B. *see* Romagnoli, I.
Larsen, M.L. *see* Mathiassen, O.N.
Loennechen, J.P. *see* Kemi, O.J.
Lőrincz, I. *see* Fülöp, L.
Lundberg, J. & Bhattacharya, J. Editor's Choice, 75

McGuigan, M. *see* Hogan, M.C.
Maeda, S. *see* Otsuki, T.
Marino, F.E. *see* Cannon, J.
Mathiassen, O.N., Buus, N.H., Olsen, H.W., Larsen, M.L., Mulvany, M.J. & Christensen, K.L. Forearm plethysmography in the assessment of vascular tone and resistance vasculature design: new methodological insights, 91
Matsumoto, T. *see* Kamata, K.

Metzger, I.F., Sertorio, J.T.C. & Tanus-Santos, J.E. Relationship between systemic nitric oxide metabolites and cyclic GMP in healthy male volunteers, 123
Mikó, I. *see* Fülöp, L.
Miyauchi, T. *see* Otsuki, T.
Mulvany, M.J. *see* Mathiassen, O.N.
Musch, T.I. *see* Ferreira, L.F.

Naito, T., Ozawa, Y., Tomoyasu, M., Inagaki, M., Fukue, M., Sakai, M., Yamamoto, T., Ishikawa, S. & Onizuka, M. New method for evaluation of lung lymph flow rate with intact lymphatics in anaesthetized sheep, 139
Nánási, P.P. *see* Fülöp, L.
Noguchi, E. *see* Kamata, K.
Norrbom, J. *see* Krämer, D.K.

Ohno, H. *see* Ikeda, S.
Olbers, T. *see* Ewert, S.
Olsen, H.W. *see* Mathiassen, O.N.
Onambele, G.N.L., Bruce, S.A. & Woledge, R.C. Oestrogen status in relation to the early training responses in human thumb adductor muscles, 41
Onizuka, M. *see* Naito, T.
Otsuki, T., Maeda, S., Iemitsu, M., Saito, Y., Tanimura, Y., Ajisaka, R. & Miyauchi, T. Contribution of systemic arterial compliance and systemic vascular resistance to effective arterial elastance changes during exercise in humans, 15
Ozawa, Y. *see* Naito, T.

Padilla, D.J. *see* Ferreira, L.F.
Petô, K. *see* Fülöp, L.
Poole, D.C. *see* Ferreira, L.F.

Rahman, M. *see* Wang, M.-D.
Romagnoli, I., Gorini, M., Gigliotti, F., Bianchi, R., Lanini, B., Grazzini, M., Stendardi, L. & Scano, G. Chest wall kinematics, respiratory muscle action and dyspnoea during arm vs. leg exercise in humans, 63
Rosado, J.A. *see* Woodard, G.E.

Saito, Y. *see* Otsuki, T.
Sakai, M. *see* Naito, T.
Sand, O. *see* Hafting, T.
Sankai, Y. *see* Ikeda, S.
Satoh, T. *see* Kamata, K.
Scano, G. *see* Romagnoli, I.
Sertorio, J.T.C. *see* Metzger, I.F.
Shigenobu, K. *see* Kamata, K.
Smith, G.L. *see* Kemi, O.J.
Snoeckx, L.H.E.H., oude Egbrink, M. & van der Vusse, G.J. Letter to the editor: Workshop on 'Innovative methods in teaching physiology. Experiences with problem-based learning' at the joint meeting of the German Physiological Society and the Federation of European Physiological Societies, 225
Spak, E. *see* Ewert, S.
Stendardi, L. *see* Romagnoli, I.
Szabó, G. *see* Fülöp, L.

Taguchi, K. *see* Kamata, K.
Takemasa, T. *see* Ikeda, S.
Tanaka, H. *see* Kamata, K.
Tanimura, Y. *see* Otsuki, T.
Tanus-Santos, J.E. *see* Metzger, I.F.
Tarpenning, K.M. *see* Cannon, J.
Tomoyasu, M. *see* Naito, T.
Tóth, I.B. *see* Fülöp, L.

van der Vusse, G.J. *see* Snoeckx, L.H.E.H.

Wamberg, S. *see* Gammelgaard, I.
Wang, M.-D., Rahman, M., Zhu, D. & Bäckström, T. Pregnenolone sulphate and Zn^{2+} inhibit recombinant *rat* $GABA_A$ receptor through different channel property, 153
Westerkamp, L.M. *see* Gavin, T.P.
Williams, J. *see* Ferreira, L.F.
Wisløff, U. *see* Kemi, O.J.
Woledge, R.C. *see* Onambele, G.N.L.
Woodard, G.E., Zhao, J. & Rosado, J.A. Different effect of ATP on ANP receptor guanylyl cyclase in spontaneously hypertensive and normotensive rats, 195

Yamamoto, T. *see* Naito, T.

Zhao, J. *see* Woodard, G.E.
Zhu, D. *see* Wang, M.-D.
Zócalo, Y. *see* Cabrera Fischer, E.I.
Zwetsloot, K.A. *see* Gavin, T.P.

Subject index

acute aerobic exercise, 113
acute hypoxia, 113
adductor pollicis, 41
adenosine triphosphate, 21
adventitial function, 103
ageing, 53, 113
aldosterone secretion, 129
AngII, 129
angiotensin receptors, 33
ANP_{1-28}, 195
antinatriuresis, 129
arm exercise, 63
arterial buffering function, 103
arterial conduit function, 103
ATP, 195
ATPγS, 195
atrophy, 77

BK, 21
blood pressure, 15

Ca^{2+}, 21
cardiac, 185
cardiac output, 15
caudal mediastinal node, 139
cell volume, 21
chest wall kinematics, 63
contractility, 185
contraction, 33, 173
cyclic GMP, 123

diabetes, 173
dofetilide, 163
dyspnoea, 63

eccentric contractions, 53
elastic modulus, 103
electrocardiography, 163
electromyography, 53
exercise, 3
exercise training, 207

fibre type, 207
first dorsal interoseus, 41
forearm blood flow, 91
functional change, 77

GABA, 153
$GABA_A$ receptor, 153
gender, 163
gene expression, 207

heart, 173
heart failure, 185
heart rate, 15
hypertension, 129
hypertrophy, 77

intra-arterial pressure, 91
ion channels, 163
isometric force, 41
isoproterenol, 173

kidney, 21
knee extensor, 53

leg exercise, 63
lung lymph, 139

metabolic clearance rate, 129
methoxamine, 173
microcirculation, 3
minimum vascular resistance, 91
muscle cross-sectional area, 41
myocytes, 185

Na^+/H^+ exchanger-1, 185
neuromuscular factors, 53
nitrate, 123
nitric oxide, 123
nitrite, 123
normalized torque, 53

oestrogen, 41
oxygen delivery, 3
oxygen uptake, 3

papillary muscle, 173
peak torque, 53
pentobarbital, 153
PGC-1α, 217
pH, 185
pregnenolone sulphate, 153
pulmonary oedema, 139
purinergic receptors, 21
P2Y receptors, 21

renal glomeruli, 195
renin-angiotensin system, 33
repolarization reserve, 163
reproducibility, 91
respiratory muscles, 63
resting vascular resistance, 91

sex hormones, 163
skeletal muscle, 3, 217
small intestine, 33
smooth muscle, 33
spinal cord injury, 207
spontaneously hypertensive rats, 195
streptozotocin, 173
stretch force, 41
stroke volume, 15
structural change, 77

thoracic duct, 139
time-course, 173
training, 41
twitch contractile properties, 53
twitch interpolation, 41

ultrasound transit-time flow meter, 139

vascular endothelial growth factor, 113
venous occlusion plethysmography, 91
venous pressure, 91
ventricular repolarization, 163
Vero cells, 21
viscous modulus, 103

wheel running, 217
WKY, 195

Zn^{2+}, 153